

**UNITED STATES DISTRICT COURT  
SOUTHERN DISTRICT OF NEW YORK**

VR OPTICS, LLC,

Plaintiff,

-v-

PELOTON INTERACTIVE, INC.,

Defendant.

16-CV-6392 (JPO)

PELOTON INTERACTIVE, INC.,

Third-Party Plaintiff,

-v-

VILLENCY DESIGN GROUP, LLC; ERIC  
VILLENCY; and JOSEPH COFFEY,

Third-Party Defendants.

**PELOTON’S STATEMENT OF  
MATERIAL FACTS IN SUPPORT OF  
ITS MOTION FOR SUMMARY  
JUDGMENT OF NON-INFRINGEMENT  
AND INVALIDITY**

Pursuant to Federal Rule of Civil Procedure 56(c), Local Civil Rule 56.1, and Judge Oetken’s Individual Practices Section 3(E), Defendant and Third-Party Plaintiff Peloton Interactive, Inc. (“Peloton”) submits this Statement of Material Facts in connection with its Motion for Summary Judgment of Non-Infringement and Invalidity, and states as follows:

**U.S. Patent No. 6,902,513 to McClure**

1. Daniel McClure filed U.S. Patent Application No. 10/114,230 on April 2, 2002, and did not claim priority to any earlier-filed patent application, which makes April 2, 2002 the effective filing date. (Ex. A, ’513 patent cover page).

2. U.S. Patent Application No. 10/114,230 issued as U.S. Patent No. 6,902,513 (“the ’513 patent”) on June 7, 2005. (Ex. A, ’513 patent cover page).

3. Glenn E. Richman was the Patent Office's primary examiner for the '513 patent. (Ex. A, '513 patent cover page).

4. According to both its Abstract and Brief Summary of the Invention, the '513 patent, which is entitled "Interactive Fitness Equipment," is "generally directed to a computerized fitness equipment that is designed to simulate, emulate, or implement actual race conditions with other users." (Ex. A, '513 patent, Abstract, Background of Invention at 2:57-59).

5. In order to simulate races between remote fitness equipment, the '513 patent discloses three features: 1) the "fitness equipment includes at least one operating component and sensors to monitor performance parameters of the at least one operating component (such as speed of movement)" (Col. 2, ll. 60-63); 2) the fitness equipment includes a communication interface "to communicate the first performance parameters to at least one remote, similarly-configured, fitness equipment" and to receive back "performance parameters from the remote fitness equipment" (Col. 2, l. 66 – Col. 3, l. 3); and 3) the fitness equipment includes logic to display the performance parameters of the remote user in a comparative fashion to the user. (Col. 3, ll. 3-7).

6. The '513 patent uses the term "fitness equipment" broadly "to denote a variety of fitness equipment and apparatus," most of which "are stationary equipment that are utilized to achieve cardiovascular or aerobic exercise." (Ex. A, '513 patent, Col. 4, ll. 40-43, 47-49).

7. To implement the simulated race conditions between coupled fitness equipment, the '513 patent discloses displays on the fitness equipment to "provide a visual read indication show[ing] where the particular user is in relation to the user or users that are operating the coupled fitness equipment." (Ex. A, '513 patent, Col. 5, ll. 30-33; *see also* Col. 5, ll. 4-35).

8. Figure 2 of the '513 patent shows an exemplary display wherein "relatively simplistic circles or dots 204 and 206 may be provided to illustrate the respective competitors" and

their position on an elliptical track. (Ex. A, '513 patent, Col. 11, ll. 28-32; *see also* Col. 11, ll. 20-32).

9. The '513 patent issued from the Patent Office with 20 total claims, of which claims 1, 6, and 18 are independent and claims 2-5, 7-17, 19 and 20 are dependent. (Ex. A, '513 patent, Col. 23, l. 11 – Col. 26, l. 53).

10. Plaintiff VR Optics, LLC ("VRO") asserts claims 1-6, 12, 13, 15, 16, and 17 against Peloton, of which claims 1 and 6 are independent claims. (Ex. B, 4/1/19 letter from Gannon).

11. [REDACTED]

12. Claim 1 of the '513 patent is directed to a system for interactive fitness and provides:

1. A system for interactive fitness comprising:
  - a server;
  - a plurality of geographically-separated fitness equipment configured for communication with the server via a wide-area network, each of the fitness equipment comprising:
    - at least one operating component;
    - logic configured to obtain first performance parameters from the at least one operating component;
    - logic configured to communicate the first performance parameters to a remote fitness equipment via the wide-area network and the server;
    - logic configured to receive second performance parameters communicated from at least one remote fitness equipment;
    - a communication interface through which data may be communicated to and from the fitness equipment;
    - a display associated with the fitness equipment;
    - and logic configured to drive the display in response to both the first and second performance parameters, such that a performance comparison between the

fitness equipment and at least one remote fitness equipment is visually displayed;

and a computer program executed by the server to configure the server for coordinating the communication among the plurality of fitness equipment, such that a plurality of the geographically-separated fitness equipment may simulate interactive exercise events. (Ex. A, '513 patent, Col. 23, ll. 12-40).

13. The interactive fitness equipment of claim 1 of the '513 patent comprises three main components: 1) a server, 2) a plurality of geographically-separated fitness equipment configured for communication with the server via a wide area network, and 3) a computer program executed by the server to configure the server for coordinating the communication among the plurality of fitness equipment, such that a plurality of the geographically-separated fitness equipment may simulate interactive exercise events. (Ex. A, '513 patent, Col. 23, ll. 12-40; Ex. D, Lenz 4/18/19 Dep. 41:3-16).

14. In addition to the three main components, claim 1 provides that each of the geographically-separated fitness equipment must include the following: 1) at least one operating component; 2) logic configured to obtain first performance parameters from the at least one operating component; 3) logic configured to communicate the first performance parameters to a remote fitness equipment via the wide-area network and the server; 4) logic configured to receive second performance parameters communicated from at least one remote fitness equipment; 5) a communication interface through which data may be communicated to and from the fitness equipment; 6) a display associated with the fitness equipment; and 7) logic configured to drive the display in response to both the first and second performance parameters, such that a performance comparison between the fitness equipment and at least one remote fitness equipment is visually displayed. . (Ex. A, '513 patent, Col. 23, ll. 12-40).

15. [REDACTED]

[REDACTED]

[REDACTED]

16. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

17. Claim 5 of the '513 patent is a dependent claim of claim 1 and provides:

5. The system as defined in claim 1, where each fitness equipment further includes logic to download data defining course data for a selected course through the communication interface. (Ex. A, '513 patent, Col. 23, ll. 55-58).

18. The Court construed "course data" to be "data defining at least a route and distance" and concluded that no further construction of "course" was necessary in light of that construction of "course data," and in doing so rejected VRO's proposed construction that would include spin classes under the definition of "course data" and "course." (Dkt. No. 112, p. 13).

19. [REDACTED]

[REDACTED]

[REDACTED]

20. Claim 6 of the '513 patent is directed to an interactive fitness equipment and provides:

6. An interactive fitness equipment comprising:

- at least one operating component configured to provide an aspect of exercise for a user of the fitness equipment;
- logic configured to obtain first performance parameters from the at least one operating element;
- logic configured to communicate the first performance parameters to a remote fitness equipment;
- logic configured to receive second performance parameters communicated from the remote fitness equipment;

a display associated with the fitness equipment;  
and logic configured to control the display in response to both the first and second performance parameters, such that a performance comparison between the fitness equipment and at least one remote fitness equipment is visually displayed. (Ex. A, '513 patent, Col. 23, l. 59 – Col. 24, l. 6).

21. Claim 6 provides that each piece of interactive fitness equipment must include all of the following: 1) at least one operating component configured to provide an aspect of exercise for a user of the fitness equipment; 2) logic configured to obtain first performance parameters from the at least one operating element; 3) logic configured to communicate the first performance parameters to a remote fitness equipment; 4) logic configured to receive second performance parameters communicated from the remote fitness equipment; 5) a display associated with the fitness equipment; and 6) logic configured to control the display in response to both the first and second performance parameters, such that a performance comparison between the fitness equipment and at least one remote fitness equipment is visually displayed. (Ex. A, '513 patent, Col. 23, l. 59 – Col. 24, l. 6).

#### **McClure's Divisional Patent Application**

22. On February 14, 2005, Daniel McClure filed U.S. Patent Application No. 11/057,541, which is a continuation of the application that issued into the '513 patent. (Ex. F, MC00571, pros. hist. of '541 application).

23. McClure filed a preliminary amendment and added the following claim 20, which provided:

20. An interactive fitness equipment configured for communication to a second fitness equipment, which second fitness equipment is geographically-separated from the interactive fitness equipment, the interactive fitness equipment comprising:

at least one operating component;

logic configured to communicate a first performance parameter, relating to the at least one operating component, the second fitness equipment;

logic configured to receive second performance parameters communicated from the second fitness equipment;

a communication interface through which data may be communicated to and from the fitness equipment;

a display associated with the fitness equipment; and

logic configured to drive the display in response to both the first and second performance parameters, such that a performance comparison between the fitness equipment and second fitness equipment is visually displayed.

(Ex. G, MC00655-661, pros. hist. of '541 application).

24. On August 5, 2005, Examiner Glenn E. Richman (the same examiner for the '513 patent) issued a non-final office action rejecting claim 20 of the divisional application as being wholly anticipated by U.S. Patent No. 6,921,351 to Hickman ("Hickman"). (Ex. H, MC00562-569, pros. hist. of '541 application).

25. Specifically, the examiner found that each element of pending claim 20 of the divisional application was shown in Fig. 1 and Col. 2, ll. 48 – et seq. from Hickman. (Ex. H, MC00562-569, pros. hist. of '541 application).

26. On October 10, 2005, McClure responded to the office action rejection by providing a declaration swearing that he conceived of the idea for the patent application prior to the filing date of Hickman and then proceeded with diligence from the time of conception until the filing of the parent application, which issued as the '513 patent. (Ex. I, MC00517-538, pros. hist. of '541 application).

27. McClure's declaration alleged conception of the invention "at least by October 18, 2001," and his submitted evidence in support of this conception was a one-page outline attached as Exhibit A to his declaration. (Ex. I, MC00517-538, pros. hist. of '541 application).

28. Other than this declaration alleging an earlier priority date, McClure did not otherwise respond to the examiner's rejection of claim 20 of the divisional application as being anticipated by Hickman. (Ex. I, MC00517-538, pros. hist. of '541 application).

29. On December 27, 2005, the examiner issued a final office action maintaining his rejection of claim 20 based on Hickman and rejected McClure's attempt to establish an earlier conception date. (Ex. J, MC00506-516, pros. hist. of '541 application).

30. Specifically, the examiner said that "the evidence submitted is insufficient to establish a conception of the invention prior to the effective date of the Hickman reference," "conception is more than a vague idea of the invention," and "the evidence submitted is insufficient to establish diligence from a date prior to the date of reduction to practice of the Hickman reference to either a constructive reduction to practice or an actual reduction to practice." (Ex. J, MC00506-516, pros. hist. of '541 application).

31. McClure never responded to this office action, and on July 3, 2006, the examiner issued a notice of abandonment for the divisional application for McClure's failure to respond. (Ex. K, MC00504-505, pros. hist. of '541 application).

32. The examiner's conclusion that Hickman discloses each limitation of claim 20 of the divisional application went un rebutted by McClure. (Ex. K, MC00504-505, pros. hist. of '541 application).

#### **The Accused Peloton Bike**

33. [REDACTED]

[REDACTED]

[REDACTED]



[REDACTED]

34. The Peloton bike includes two mechanical operating components: 1) the brake/resistance mechanism, and 2) the pedal crank/flywheel mechanism. (Ex. M, Cortese Dep. 56:17-63:3).

35. The resistance mechanism is a magnetic resistance mechanism, and resistance is controlled by turning a knob on the bike that moves the magnet assembly relative to the flywheel. (Ex. M, Cortese Dep. 61:25-62:13).

36. [REDACTED]

[REDACTED]

[REDACTED]

37. As the user pedals the bike, the crank is rotated, which in turn moves the belt and ultimately causes the flywheel to rotate. (Ex. M, Cortese Dep. 58:3-60:3).

38. [REDACTED]

[REDACTED]

[REDACTED] [REDACTED] [REDACTED]

[REDACTED]

39. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

40. [REDACTED]

41. [REDACTED]

42. VRO's source code expert Dr. Shasha did not proffer a report or opinion and is precluded from now doing so. Dr. Shasha's opinions and observations, whatever they are, were not disclosed pursuant to the Federal Rules of Civil Procedure or this Court's December 10, 2018 Order granting Peloton's letter motion for extension of time to complete discovery (Dkt. No. 121).

43. [REDACTED]

44. [REDACTED]

#### **The Accused Peloton Treadmill**

45. The Peloton treadmill is a treadmill that includes the following components: a slat running surface, handrails, two motors (one to drive the running surface and one for raising and lower the incline of the running surface), a speed sensor, an incline sensor, a power supply and a

touchscreen display screen. (Ex. O, Peloton Tread User Manual; Ex. M, Cortese Dep. 133:17-142:10).

46. The Peloton treadmill includes two mechanical operating components: 1) the motor to drive the running deck, and 2) the deck incline mechanism. (Ex. M, Cortese Dep. 133:19-134:6; 135:8-13).

47. The Peloton treadmill has an optical speed sensor, which counts the revolutions of the motor driving the running deck and reports a speed value of the running deck based on a conversion factor between motor speed and running deck speed. (Ex. M, Cortese Dep. 137:21-25; 140:14-141:4).

48. The Peloton treadmill has a position sensor to measure the incline of the running deck and reports a percent grade value. (Ex. M, Cortese Dep. 139:17-140:13).

49. The sensor board on the treadmill uses information from these two sensors to provide feedback statistics to the user including speed, pace, incline, output, total elevation, distance, and total output. (Ex. O, Peloton Tread User Manual).

50. [REDACTED]

51. [REDACTED]

52. [REDACTED]

53.

[REDACTED]

54.

[REDACTED]

55.

[REDACTED]

56.

[REDACTED]

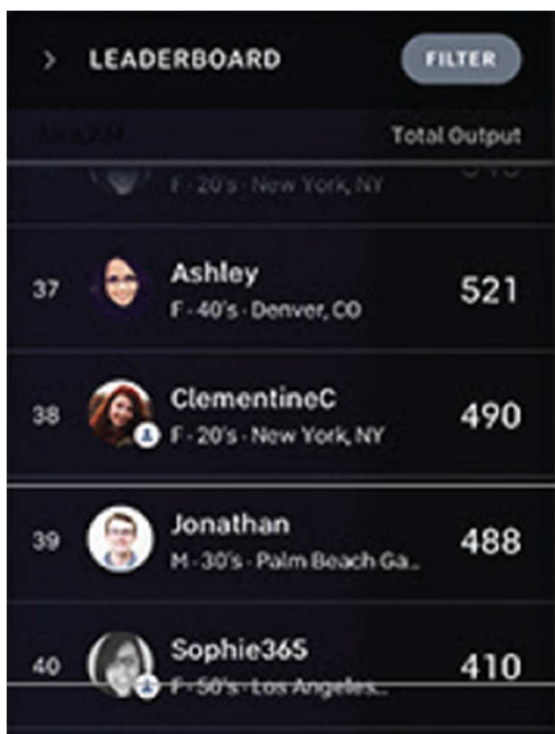
**The Peloton Leaderboard Server and Leaderboard**





57.

[REDACTED]

58.

[REDACTED]



			Total Output
		F - 20's - New York, NY	
37		Ashley F - 40's - Denver, CO	521
38		ClementineC F - 20's - New York, NY	490
39		Jonathan M - 30's - Palm Beach Ga..	488
40		Sophie365 F - 50's - Los Angeles..	410

59.

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

60.

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

61.

[REDACTED]

62.

[REDACTED]

63.

[REDACTED]

64.

[REDACTED]

65.

[REDACTED]

66.

[REDACTED]

67.

[REDACTED]

68.

[REDACTED]

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[REDACTED]

71.

[REDACTED]

72.

[REDACTED]

73. [REDACTED]

74. [REDACTED]

75. The Peloton bike and treadmill offer users the ability to take live or on-demand group fitness classes from their home over the internet that are real exercise events with real participants on real exercise equipment. (Ex. P, Peloton Bike User Manual; Ex. O, Peloton Tread User Manual).

**U.S. Patent No. 6,997,852 To Watterson**

76. U.S. Patent No. 6,997,852 to Watterson (“Watterson”) was filed on February 2, 2001 and is therefore prior art to the McClure ’513 patent. (Ex. Q, Watterson, cover page).

77. Watterson discloses a system for interactive fitness including connecting multiple remotely located exercise devices over a network, and sharing performance parameters between the remotely located exercise devices to simulate races between the remotely located exercise devices. (Ex. Q, Watterson, Fig. 1; Col. 6, ll. 45-67; Col. 8, ll. 12-17; Col. 44, ll. 55-65; Col. 51, ll. 8-15).

78. VRO’s technical expert Steven Lenz served a rebuttal expert report regarding validity of the ’513 patent on April 1, 2019. (Ex. R, Lenz 4/1 Validity Report).

79. [REDACTED]



80. Watterson discloses a server. (Ex. Q, Watterson, Figs. 7, 10; Col. 17, ll. 27-35 (cited in memorandum of law); Col. 32, ll. 53-64).

81. VRO's technical expert Steven Lenz admitted in his deposition that Watterson disclosed a communication system with reference numeral 18, but he believed that communication system 18 was not definitively described as a server. (Ex. E, 5/1/19 Lenz Dep. 253:9-254:14 (cited in memorandum of law; *see also* 254:15 – 255:7)).

82. VRO's technical expert Steven Lenz admitted in his deposition that the Court could construe the communication system 18 to be a server. (Ex. E, Lenz 5/1/19 Dep. p. 308:24-311:21).

83. Watterson discloses the communication system 18 to be a server. (Ex. Q, Watterson Col. 31, ll. 30-36; Col. 32, ll. 53-56).

84. Watterson discloses a “communication module 254” that “has a similar configuration to that of communication system 18 and is capable of transmitting and receiving data.” (Ex. Q, Watterson Col. 31, ll. 30-36).

85. Watterson discloses that this “communication module 254 may act as and take the form of a server, with associated hardware and/or software modules to enable communication between the various modules of the illustrated system 250.” (Ex. Q, Watterson Col. 32, ll. 53-56).

86. Watterson discloses a plurality of geographically-separated fitness equipment configured for communication with the server via a wide-area network. (Ex. Q, Watterson, Fig. 1; Col. 6, ll. 45 – 67).

87. VRO's technical expert Steven Lenz admitted in his deposition that Watterson discloses a plurality of geographically-separated fitness equipment configured for communication with the server via a wide-area network. (Ex. E, 5/1/19 Lenz Dep. 293:12-295:5).

88. Watterson discloses that the fitness equipment has an operating component. (Ex. Q, Watterson, Col. 6, ll. 25-44).

89. VRO's technical expert Steven Lenz admitted in his deposition that Watterson discloses fitness equipment having an operating component. (Ex. E, 5/1/19 Lenz Dep. 295:6-296:7).

90. Watterson discloses that the fitness equipment has logic configured to obtain first performance parameters from the operating component. (Ex. Q, Watterson, Col. 8, ll. 4-24; Col. 51, ll. 8-24).

91. VRO's technical expert Steven Lenz admitted in his deposition that Watterson discloses that the fitness equipment has logic configured to obtain first performance parameters from the operating component. (Ex. E, 5/1/19 Lenz Dep. 296:23-297:18).

92. Watterson discloses that the fitness equipment has logic configured to communicate the first performance parameters to a remote fitness equipment via the wide-area network and the server. (Ex. Q, Watterson, Col. 8, ll. 4-24; Col. 11, ll. 7-20; Col. 19, ll. 21-31; Col. 19, ll. 53-64; Col. 31, ll. 30-49; Col. 32, ll. 53-64; Col. 51, ll. 8-24).

93. VRO's technical expert Steven Lenz admitted in his deposition that Watterson discloses that the fitness equipment has logic configured to communicate the first performance parameters to a remote fitness equipment via the wide-area network and the server (making the assumption to answer this question that communication system 18 is a server). (Ex. E, 5/1/19 Lenz Dep. 297:19-301:5).

94. Watterson discloses that the fitness equipment has logic configured to receive second performance parameters communicated from at least one remote fitness equipment. (Ex.

Q, Watterson, Col. 8, ll. 4-24; Col. 11, ll. 7-20; Col. 19, ll. 21-31; Col. 19, ll. 53-64; Col. 51, ll. 8-24).

95. VRO's technical expert Steven Lenz admitted in his deposition that Watterson discloses that the fitness equipment has logic configured to receive second performance parameters communicated from at least one remote fitness equipment. (Ex. E, 5/1/19 Lenz Dep. 302:3-13).

96. Watterson discloses that the fitness equipment has a communication interface through which data may be communicated to and from the fitness equipment. (Ex. Q, Watterson, Fig. 10; Col. 6, ll. 62-66; Col. 8, ll. 4-24; Col. 19, ll. 47-64).

97. VRO's technical expert Steven Lenz admitted in his deposition that Watterson discloses that the fitness equipment has a communication interface through which data may be communicated to and from the fitness equipment. (Ex. E, 5/1/19 Lenz Dep. 302:15-306:6).

98. Watterson discloses that the fitness equipment has a display. (Ex. Q, Watterson, Fig. 6; Col. 13, l. 65 – Col. 14, l. 12).

99. VRO's technical expert Steven Lenz admitted in his deposition that Watterson discloses that the fitness equipment has a display. (Ex. E, 5/1/19 Lenz Dep. 306:14-17).

100. Watterson discloses that the fitness equipment has logic configured to *drive* the display in response to both the first and second performance parameters, such that a performance comparison between the fitness equipment and at least one remote fitness equipment is visually displayed. (Ex. Q, Watterson, Col. 43, ll. 38-56; Col. 44, ll. 31-40; Col. 44, ll. 55-65).

101. Watterson discloses that the fitness equipment has logic configured to *control* the display in response to both the first and second performance parameters, such that a performance comparison between the fitness equipment and at least one remote fitness equipment is visually displayed. (Ex. Q, Watterson, Col. 43, ll. 38-56; Col. 44, ll. 31-40; Col. 44, ll. 55-65).

102. Watterson discloses virtual racing wherein “two or more individuals schedule a live on live session, such as in a private room of personal training module 312 where they may race one against the other, while viewing graphical representations of the distant, time, and speed of the other competitors.” (Ex. Q, Watterson Col. 44, ll. 32-37).

103. Watterson discloses that “the display may include a racing track that shows a relative position of each competitor one with another, or a trail that each competitor races along.” (Ex. Q, Watterson Col. 44, ll. 55-62).

104. VRO’s technical expert Steven Lenz admitted in his deposition that Watterson discloses racing against users on other fitness equipment, but does not believe it discloses the visual display of a performance comparison between the competitors as construed by the Court. (Ex. E, 5/1/19 Lenz Dep. 306:18-307:22).

105. [REDACTED]

[REDACTED]

[REDACTED]

106. Watterson discloses a computer program executed by the server that configures the server for coordinating the communication among the plurality of fitness equipment, such that a plurality of the geographically-separated fitness equipment may simulate interactive exercise events. (Ex. Q, Watterson, Fig. 7; Col. 21, ll. 1-10; Col. 43, ll. 26-56; Col. 51, ll. 8-24).

107. VRO’s technical expert Steven Lenz admitted in his deposition that Watterson discloses a computer program executed by the server that configures the server for coordinating the communication among the plurality of fitness equipment, such that a plurality of the geographically-separated fitness equipment may simulate interactive exercise events if the Court

would construe the communication system 18 to be a server. (Ex. E, Lenz 5/1/19 Dep. 311:3-20 (cited in memorandum of law; 308:24-311:2)).

108. Watterson discloses the communication system 18 to be a server. (Ex. Q, Watterson Col. 31, ll. 30-36; Col. 32, ll. 53-56).

109. Watterson discloses a “communication module 254” that “has a similar configuration to that of communication system 18 and is capable of transmitting and receiving data.” (Ex. Q, Watterson Col. 31, ll. 30-36).

110. Watterson discloses that this “communication module 254 may act as and take the form of a server, with associated hardware and/or software modules to enable communication between the various modules of the illustrated system 250.” (Ex. Q, Watterson Col. 32, ll. 53-56).

111. Watterson discloses that the fitness equipment can be a treadmill, a skiing machine, an exercise bike, a rowing machine, a stepping machine, and an orbital stepping machine. (Ex. Q, Watterson, Fig. 1; Col. 6, ll. 39-44).

112. Watterson discloses that the display is a virtual-reality display, a cathode-ray tube, a liquid-crystal display, a light-emitting diode display, and a gas-plasma display. (Ex. Q, Watterson, Col. 14, ll. 10-18).

113. Watterson discloses that the operating component of the fitness equipment is a motor, a flywheel, or a conveyor. (Ex. Q, Watterson, Col. 9, ll. 7-15).

114. Watterson discloses that the fitness equipment has logic to download data defining course data for a selected course through the communication interface. (Ex. Q, Watterson, Col. 21, ll. 1-19; Col. 33, l. 66 – Col. 34, l. 22; Col. 44, ll. 9-15; Col. 52, ll. 29-38).

115. Watterson discloses that the fitness equipment has a communication interface. (Ex. Q, Watterson, Fig. 10; Col. 6, ll. 62-66; Col. 8, ll. 4-24; Col. 19, ll. 47-64).

116. VRO's technical expert Steven Lenz admitted in his deposition that Watterson discloses that the fitness equipment has a communication interface through which data may be communicated to and from the fitness equipment. (Ex. E, 5/1/19 Lenz Dep. 302:15-306:6).

117. Watterson discloses that the communication interface of the fitness equipment has logic configured to control communication with the remote fitness equipment over a communication link, which includes a wireless link, a direct electrical connection, a local-area network, and a wide-area network. (Ex. Q, Watterson, Col. 6, ll. 53-66)

118. Watterson discloses that the fitness equipment has a communication interface that is configured to communicate with the remote fitness equipment through at least one intermediate computer. (Ex. Q, Watterson, Fig. 1; Col. 6, ll. 50-57; Col. 10, ll. 14-18).

119. Watterson discloses that the fitness equipment has a microphone and logic for communicating an audible input to the microphone to a remote fitness equipment in the form of audio data. (Ex. Q, Watterson, Fig. 6, Col. 12, ll. 29-39; Col. 12, ll. 46-47).

120. Watterson discloses that the fitness equipment has a speaker and logic for audibly outputting audio data received from a remote fitness equipment. (Ex. Q, Watterson, Fig. 6, Col. 12, ll. 29-39; Col. 14, ll. 29-35).

**U.S. Patent No. 6,921,351 To Hickman**

121. U.S. Patent No. 6,921,351 to Hickman ("Hickman") was filed on October 19, 2001 and is therefore prior art to the McClure '513 patent. (Ex. S, Hickman, cover page).

122. Hickman discloses a system for interactive fitness including connecting multiple remotely located exercise devices over a network, and sharing performance parameters between the remotely located exercise devices to simulate races between the remotely located exercise devices. (Ex. S, Hickman, Figs. 10, 12 and 13; Col. 2, ll. 22-34; Col. 2, ll. 52-55; Col. 3, ll. 4-11;

Col. 14, ll. 14-55 (cited in memorandum of law); Col. 15, l. 56 – Col. 6, l. 6; Col. 27, ll. 17-22; Col. 27, ll. 50-63).

123. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

124. Hickman discloses a server. (Ex. S, Hickman, Figs. 1, 8, 10; Col. 2, ll. 22-34; Col. 2, ll. 52-55; Col. 3, ll. 4-11; Col. 5, ll. 31-33).

125. Hickman discloses a plurality of geographically-separated fitness equipment configured for communication with the server via a wide-area network. (Ex. S, Hickman, Fig. 10, 12, 13; Col. 3, ll. 4-11; Col. 16, ll. 29-42; Col. 30, ll. 15-26).

126. Hickman discloses that the fitness equipment has an operating component. (Ex. S, Hickman, Col. 5, ll. 60-67; Col. 6, ll. 29-47).

127. Hickman discloses that the fitness equipment has logic configured to obtain first performance parameters from the operating component. (Ex. S, Hickman, Col. 5, ll. 52-57; Col. 6, ll. 47-54).

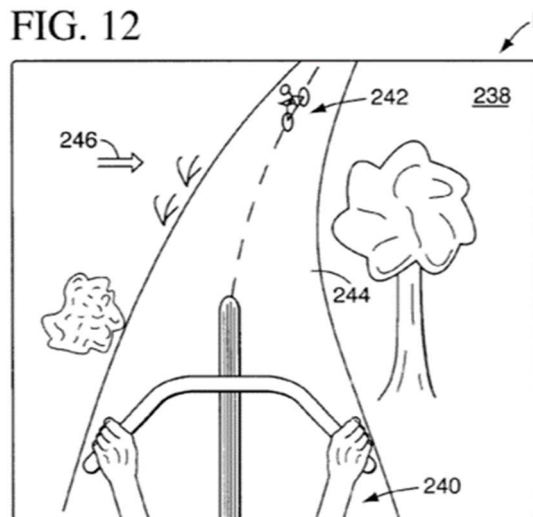
128. Hickman discloses that the fitness equipment has logic configured to communicate the first performance parameters to a remote fitness equipment via the wide-area network and the server. (Ex. S, Hickman, Col. 3, ll. 4-11; Col. 5, ll. 31-33; Col. 13, ll. 1-6; Col. 14, ll. 1-8; Col. 16, ll. 39-42; Col. 30, ll. 15-26).

129. Hickman discloses that the fitness equipment has logic configured to receive second performance parameters communicated from at least one remote fitness equipment. (Ex. S, Hickman, Col. 2, ll. 28-31; Col. 3, ll. 4-11; Col. 5, ll. 31-33; Col. 16, ll. 39-42; Col. 18, ll. 58-62).

130. Hickman discloses that the fitness equipment has a communication interface through which data may be communicated to and from the fitness equipment. (Ex. S, Hickman, Fig. 10; Col. 2, ll. 22-34; Col. 8, ll. 6-13; Col. 18, ll. 58-62).

131. Hickman discloses that the fitness equipment has a display. (Ex. S, Hickman, Figs. 10, 12, 14; Col. 6, ll. 55-64; Col. 8, ll. 54-56).

132. Hickman discloses that the fitness equipment has logic configured to drive the display in response to both the first and second performance parameters, such that a performance comparison between the fitness equipment and at least one remote fitness equipment is visually displayed. (Ex. S, Hickman, Fig. 12; Col. 3, ll. 4-11; Col. 15, l. 56-64 (cited in memorandum of law); Col. 30, ll. 15-26). Below is Figure 12 from Hickman.



133. Hickman discloses a computer program executed by the server that configures the server for coordinating the communication among the plurality of fitness equipment, such that a



plurality of the geographically-separated fitness equipment may simulate interactive exercise events. (Ex. S, Hickman, Fig. 12; Col. 3, ll. 4-11; Col. 15, l. 56 – Col. 16, l. 6; Col. 30, ll. 15-26).

134. Hickman discloses that the fitness equipment can be a treadmill, an exercise bike, and a rowing machine. (Ex. S, Hickman, Fig. 1; Col. 2, ll. 58-61; Col. 5, ll. 37-39; Col. 16, ll. 36-42).

135. Hickman discloses that the display is a virtual-reality display, a cathode-ray tube, and a light-emitting diode display. (Ex. S, Hickman, Fig. 10; Col. 6, ll. 55-58; Col. 23, ll. 62-65).

136. Hickman discloses that the operating component of the fitness equipment is a motor and a magnetic arrangement. (Ex. S, Hickman, Col. 6, ll. 16-19; Col. 6, ll. 35-47).

137. Hickman discloses that the fitness equipment has logic to download data defining course data for a selected course through the communication interface. . (Ex. S, Hickman, Fig. 7; Col. 2, ll. 38-42; Col. 11, 8-14).

138. Hickman discloses that the fitness equipment has logic configured to control the display in response to both the first and second performance parameters, such that a performance comparison between the fitness equipment and at least one remote fitness equipment is visually displayed. (Ex. S, Hickman, Fig. 12; Col. 3, ll. 4-11; Col. 15, l. 56-64 (cited in memorandum of law); Col. 30, ll. 15-26).

139. Hickman discloses that the fitness equipment has a communication interface. (Ex. S, Hickman, Fig. 10; Col. 2, ll. 22-34; Col. 8, ll. 6-13; Col. 18, ll. 58-62).

140. Hickman discloses that the communication interface of the fitness equipment has logic configured to control communication with the remote fitness equipment over a communication link, which includes a wireless link, a direct electrical connection, a local-area

network, and a wide-area network. (Ex. S, Hickman, Figs. 1, 10; Col. 3, ll. 4-7; Col. 7, 33-37; Col. 14, l. 58 – Col. 15, l. 3).

141. Hickman discloses that the fitness equipment has a communication interface that is configured to communicate with the remote fitness equipment through at least one intermediate computer. (Ex. S, Hickman, Figs. 1, 11; Col. 3, ll. 32-36; Col. 5, ll. 39-45).

142. Hickman discloses that the fitness equipment has a microphone and logic for communicating an audible input to the microphone to a remote fitness equipment in the form of audio data. (Ex. S, Hickman, Col. 28, ll. 51-54).

143. Hickman discloses that the fitness equipment has a speaker and logic for audibly outputting audio data received from a remote fitness equipment. (Ex. S, Hickman, Col. 6, ll. 29-34; Col. 6, ll. 65-66).

#### **UltraCoach VR**

144. UltraCoach VR was a commercially available product available for sale in the United States at least by 1998 and is therefore prior art to the McClure '513 patent. (Ex. T, Stewart Dep. 33:19-34:11; 35:5-37:10).

145. UltraCoach VR was demonstrated at public trade shows in the United States at least by the end of 1999 and is therefore prior art to the McClure '513 patent. (Ex. T, Stewart Dep. 36:2-37:10).

146. Paul Stewart is a software engineer with a computer science degree, and he developed software products for the fitness industry beginning in the early 1990s. (Ex. T, Stewart Dep. 11:13-17:20).

147. Paul Stewart was the software engineer solely responsible for writing the software code for the UltraCoach VR product that was commercially sold. (Ex. T, Stewart Dep. 49:4-15).

148. UltraCoach VR was a system for interactive fitness that allowed users on stationary fitness equipment the ability to virtually race other users on remotely located stationary fitness equipment in real time over courses that were “turn and grade” representations of famous race courses such as the Atlanta Olympics road course. (Ex. T, Stewart Dep. 62:5-64:7, 115:2-118:3; Ex. U, Stewart Dep. Ex. 2, pp. 9, 38-40; Ex. V, Stewart Dep. Ex. 5).

149. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

150. The UltraCoach VR product used a server. (Ex. T, Stewart Dep. 163:8-20; 164:6-11).

151. The UltraCoach VR product supported a plurality of geographically-separated fitness equipment that were configured for communication with the server via a wide-area network. (Ex. T, Stewart Dep. 69:24-73:6; 163:8-20; 164:6-11; Ex. U, Stewart Dep. Ex. 2, pp. 33, 38).

152. The UltraCoach VR product supported fitness equipment that had an operating component. (Ex. T, Stewart Dep. 24:14-25:16; 37:20-38:15).

153. The UltraCoach VR product had logic configured to obtain first performance parameters from the operating component of the fitness equipment. (Ex. T, Stewart Dep. 45:22-47:2; 48:1-49:6; 65:24-66:18).

154. The UltraCoach VR product had logic configured to communicate the first performance parameters to a remote fitness equipment via the wide-area network and the server. (Ex. T, Stewart Dep. 65:24-66:18; Ex. U, Stewart Dep. Ex. 2, pp. 33, 38).

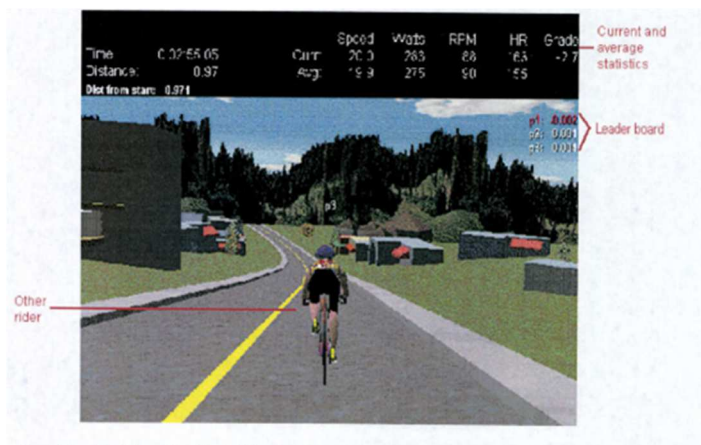
155. The UltraCoach VR product had logic configured to receive second performance parameters communicated from at least one remote fitness equipment. (Ex. T, Stewart Dep. 65:17-66:23).

156. The UltraCoach VR product had a communication interface through which data may be communicated to and from the fitness equipment. (Ex. T, Stewart Dep. 39:20-40:11; 41:15-42:14; 124:16-125:13).

157. The UltraCoach VR product used a display. (Ex. T, Stewart Dep. 44:1-45:19; Ex. U, Stewart Dep. Ex. 2, pp. 25, 31).

158. The UltraCoach VR product had logic configured to drive the display in response to both the first and second performance parameters, such that a performance comparison between the fitness equipment and at least one remote fitness equipment is visually displayed. (Ex. T, Stewart Dep. 44:23-45:8; 64:1-65:9; Ex. U, Stewart Dep. Ex. 2, p. 31).

159. The UltraCoach VR product displayed the following screenshot from two users using the UltraCoach VR product to virtually race.



(Ex. U, Stewart Dep. Ex. 2, p. 31).

160. The UltraCoach VR product had a computer program executed by the server that configured the server for coordinating the communication among the plurality of fitness

equipment, such that a plurality of the geographically-separated fitness equipment were able to simulate interactive exercise events. (Ex. T, Stewart Dep. 161:20-166:18; 172:1-180:15; Ex. U, Stewart Dep. Ex. 2, p. 38).

161. The UltraCoach VR product was used with treadmills, exercise bikes, rowing machines, skiing machines, steppers and orbital stepping machines. (Ex. T, Stewart Dep. 89:17-19; 132:6-133:18; 198:2-199:24; Ex. U, Stewart Dep. Ex. 2, pp. 18-20; Ex. W, Stewart Dep. Ex. 7).

162. The UltraCoach VR product was used also with a bike trainer, which is a device that turns a road bike into a stationary bike by supporting the bike in a position with its back wheel off of the ground. (Ex. T, Stewart Dep. 24:14-25:16).

163. The UltraCoach VR product used a virtual-reality display and a cathode-ray tube. (Ex. T, Stewart Dep. 43:3-12; 118:4-9; Ex. U, Stewart Dep. Ex. 2, p. 27).

164. The UltraCoach VR product had operating components of the fitness equipment including a motor, a wheel and a magnetic arrangement. (Ex. T, Stewart Dep. 24:14-25:16; 127:19-128:14).

165. The UltraCoach VR product had logic to download data defining course data for a selected course through the communication interface. (Ex. T, Stewart Dep. 88:14-89:16; Ex. U, Stewart Dep. Ex. 2, pp. 9, 29).

166. The UltraCoach VR product had logic configured to control the display in response to both the first and second performance parameters, such that a performance comparison between the fitness equipment and at least one remote fitness equipment is visually displayed. (Ex. T, Stewart Dep. 44:23-45:8; 64:1-65:9; Ex. U, Stewart Dep. Ex. 2, p. 31).

167. The UltraCoach VR product had a communication interface. (Ex. T, Stewart Dep. 39:20-40:11; 41:15-42:14; 124:16-125:13).

168. The UltraCoach VR product had a communication interface that had logic configured to control communication with the remote fitness equipment over a communication link, which includes a wireless link, a direct electrical connection, a local-area network, and a wide-area network. (Ex. T, Stewart Dep. 159:14-161:14; Ex. U, Stewart Dep. Ex. 2, pp. 33, 38).

169. The UltraCoach VR product had a communication interface that was configured to communicate with the remote fitness equipment through at least one intermediate computer. (Ex. T, Stewart Dep. 170:13-173:11; Ex. U, Stewart Dep. Ex. 2, p. 38).

170. The UltraCoach VR product supported a microphone and had logic for communicating an audible input to the microphone to a remote fitness equipment in the form of audio data. (Ex. T, Stewart Dep. 75:9-76:12).

171. The UltraCoach VR product supported a speaker and had logic for audibly outputting audio data received from a remote fitness equipment. (Ex. T, Stewart Dep. 75:9-76:12).

172. A later version of the UltraCoach VR product called NetAthlon was demonstrated on a television program on April 17, 2002. (Ex. T, Stewart Dep. 249:8-250:8; 252:20-254:6).

173. During the video of the television program, the NetAthlon product was demonstrated on two pieces of fitness equipment: a bike trainer with road bike and a stationary bike. (Ex. T, Stewart Dep. 254:7-256:4).

174. The version of the NetAthlon software shown during the television program was commercially available at least as early as March 14, 2002. (Ex. T, Stewart Dep. p. 278:8-284:23; Ex. X, Stewart Dep. Ex. 14).

175. The commercially available NetAthlon product had the same features as the previously-released UltraCoach VR product but with better graphics. (Ex. T, Stewart Dep. p. 226:7-230:8).

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Respectfully submitted,

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